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GULLS IN ALBERTA

Provincial
Museum
of Alberta

PROVINCIAL MUSEUM OF ALBERTA, 12845 — 102 AVENUE, EDMONTON, ALBERTA, CANADA



Introduction

Thirteen species of gulls (Family Laridae) have been recorded in Alberta. Only five, however, are considered to be common and are known to breed in the Province: the Herring Gull, California Gull, Ring-billed Gull, Franklin's Gull, and Bonaparte's Gull. The remaining eight species have been recorded only as migrants or accidentals. These species are the Glaucous Gull, Glaucous-winged Gull, Iceland Gull, Ivory Gull, Thayer's Gull, Mew Gull, Sabine's Gull, and Black-legged Kittiwake.

Gulls can be very difficult to identify. With few exceptions the species show only subtle plumage differences. Also, immature gulls go through several different plumages before acquiring their final adult plumage. When identifying gulls, the features which must be noted are: leg colour, eye (iris) colour, bill colour, and in some circumstances the colour pattern of the wing-tips and overall plumage colouration.

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BIOLOGY OF COMMON ALBERTA GULLS

HERRING GULL (*Larus argentatus*)

Range in Alberta and Identification:

Herring Gulls breed only in the northern portion of Alberta. In northwestern Alberta they nest only in the Bistcho Lake region, while in the eastern and central portions of the Province breeding birds have been reported as far south as Namur Lake in the Birch Mountains and Lower Therien Lake near St. Paul, respectively.

Herring Gulls are large in comparison with other Alberta gulls. Adults are characterized by a combination of pink legs, light eyes, a yellow bill with a red spot on the lower mandible, and black and white patterned wing-tips.

Breeding Habits:

Herring Gulls usually nest on islands in lakes; they are typically colonial nesting birds. Although a colony may contain as many as several hundred nesting pairs, Herring Gull colonies in Alberta are usually quite small: less than 100 pairs. This is perhaps due to a limited food supply for gulls in the boreal forest. The habit of nesting colonially on islands enhances protection from mammalian predators.

Very little is known of the breeding habits of Herring Gulls in northern Alberta. Birds probably return to their nesting grounds during April and soon thereafter establish territories and select mates. Nests are built on the ground and a complete clutch of three, darkly splotched, greenish-brown eggs is usually laid by mid to late May.

The eggs hatch after an incubation period of approximately 27 days. The young gulls are semi-precocial and venture from their nests when they are only a day or two old. By pecking at the red spot on the lower mandible of their parents, the young induce the adults to regurgitate partially digested food which is then consumed. The young gulls are dependent upon their parents for food for five to six weeks. Once they learn to fly they soon become independent and leave the colony.

Migration:

In the more populated regions of south and central Alberta the Herring Gull appears only as a migrant. Spring migration occurs during April. Autumn migration is more protracted and individuals may be seen from August until the last gulls leave Alberta, usually during late October.

It is not known where the Herring Gulls from Alberta spend the winter.

CALIFORNIA AND RING-BILLED GULLS

(*Larus californicus* and *Larus delawarensis*)

Range in Alberta and Identification:

California and Ring-billed gulls are the common nesting white-headed gulls of the populated regions of Alberta. Their breeding range in Alberta extends throughout the prairie region and, more sporadically, into the parkland and boreal forest as far north as Lake Athabasca. In June 1979 staff of the Provincial Museum found both of these species nesting on Ferguson Lake, west of Clairmont in the Grande Prairie region. This was the first time these species had been recorded breeding in the western portion of Alberta.

The California Gull is intermediate in size between the Ring-billed Gull and the larger Herring Gull. An adult California Gull is characterized by a combination of greenish legs, dark brown eye colour, a yellow bill with a red spot often combined with a diffuse black spot on the lower mandible, and black and white patterned wing-tips. The adult Ring-billed Gull is characterized by yellow legs, yellow eye colour, a yellow bill with black markings near the tip of both the upper and lower mandibles, and black and white patterned wing-tips. The bill markings give this gull its "ring-billed" appearance.

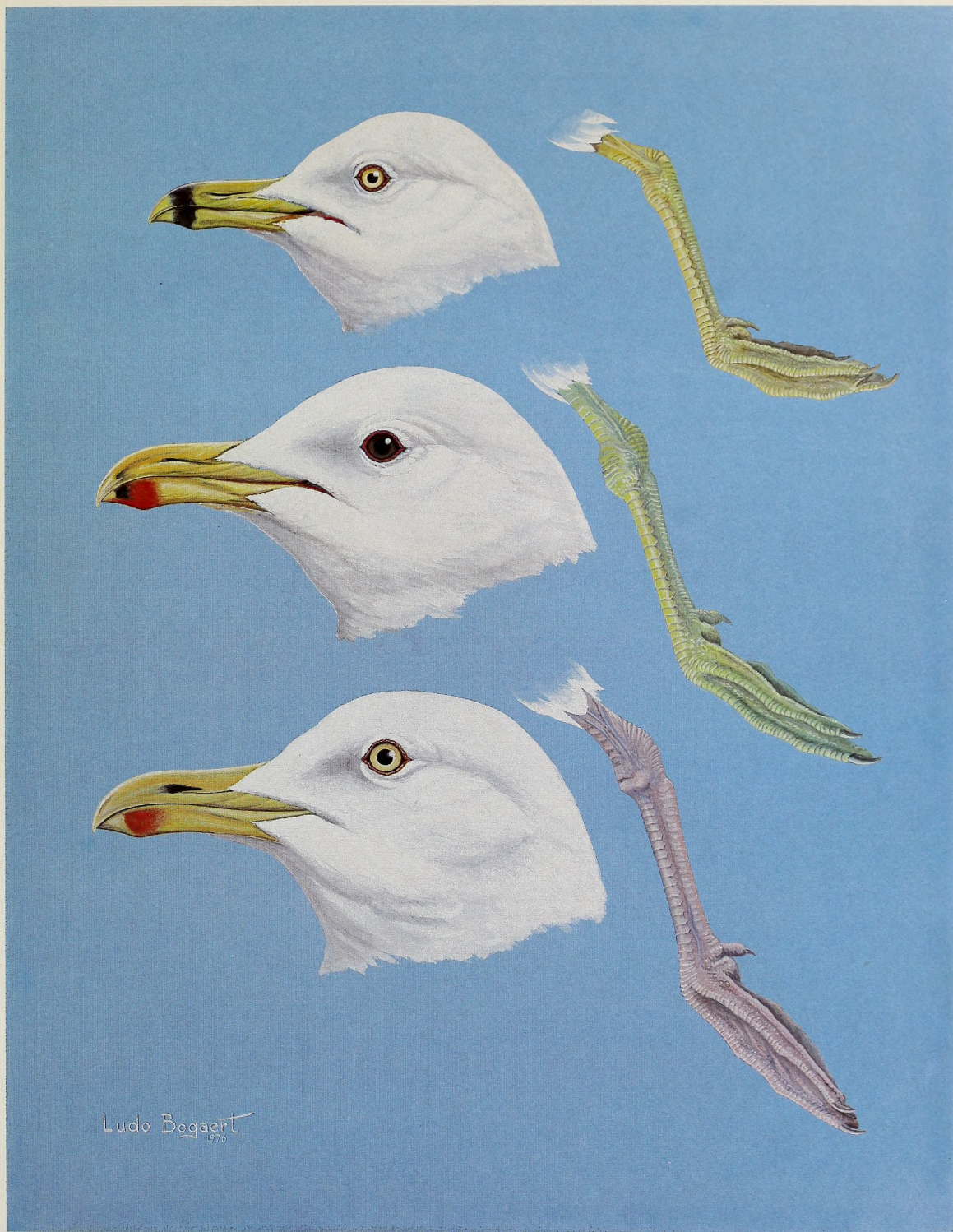
Breeding Habits:

These two species of gulls frequently nest together on the same island. Occasionally they will nest on a long peninsula, but these colonies are often not successful due to predation, typically by coyotes and foxes. When nesting on the same island these two gull species usually remain separated, dividing the area according to differences in the geological and vegetational substrate, the height of the substrate above lake level, and other more subtle factors. If two or more islands are present the gulls often segregate themselves, one species on one island and the other on the second.

California and Ring-billed gulls usually arrive in Alberta during the last week of March, slightly ahead of the Herring Gull. Though the California and Ring-billed gulls visit their nesting locations almost immediately upon their arrival, their attachment to it is relatively weak at this time.

Over the next five weeks the colony site plays an increasingly larger role in the gulls' daily lives. By mid-April the gulls will have established territories on the colony and selected mates. By the beginning of May the first eggs will be laid.

Both California and Ring-billed gulls lay clutches of three eggs. The eggs of both these species are green with dark splotching, like the eggs of the Herring Gull. The egg of the California Gull is intermediate in size between the Ring-billed Gull egg and the larger egg of the Herring Gull.



Distinguishing characteristics of the heads and legs of
Ring-billed, California, and Herring gulls.

The average incubation period of the California Gull is 26.5 days and that of the Ring-billed Gull is 25 days; gull chicks begin to appear in the colony during the last week of May. During their first few days of life gull chicks remain in or very close to their nest. If they should wander out of their parents' territory the chicks are typically attacked and frequently eaten by neighboring adult gulls. Chick mortality can be very high, particularly when a colony is disturbed.

The young gulls grow quickly. They are fed by both parents which, like the Herring Gull, regurgitate food for them. By the time the young are two to three weeks old they can be seen flapping their partially feathered wings, developing their flying skills. They are able to fly after an average fledging period of approximately 40 days, and remain in the colony 10 to 12 days longer before departing. By the end of July most Alberta colony sites will be deserted.

Migration:

Although California and Ring-billed gulls are very similar in many of their habits they differ considerably in their timing of autumn migration. The California Gulls, the larger of the two, leave Alberta almost immediately after their young are able to fly. Censuses show that their numbers are substantially reduced by the middle of August, leaving only scattered, sporadically occurring individuals.

The Ring-billed Gulls, however, generally migrate much later.

While some Ring-billed Gulls migrate soon after completion of the nesting season, large numbers remain until mid-October, usually near centers of human habitation. After this time there is a rapid migration from the Province.

Although they migrate southward from Alberta at considerably different times, California and Ring-billed gulls winter in generally the same area: the Pacific coast from Oregon to Mexico.



Colony of California and Ring-billed Gulls with White Pelicans on Utikuma Lake, Alberta.



California Gull colony on Frog Lake, Alberta.

*Herring Gull nest containing a typical clutch of three eggs,
Lake Athabasca, Alberta.*

Young California Gulls, Frog Lake, Alberta.



Distinguishing features of the head and wing of Franklin's Gull.

FRANKLIN'S GULL (*Larus pipixcan*)

Range in Alberta and Identification:

The breeding range of Franklin's Gull in Alberta overlaps closely that of California and Ring-billed gulls. There is, however, appreciable habitat separation between these species, with Franklin's Gull being most commonly found in agricultural and marsh or slough areas.

Franklin's Gull is a small gull with a black head, which readily separates it from any of the white-headed species. The legs and bill of Franklin's Gull are dark red, its eye is dark, and it has black and white patterning on its wing-tips. In the spring the breast has a noticeable rosy tinge to it.

Breeding Habits:

In southern Alberta Franklin's Gulls begin to arrive during the first days of April. Farther north, near Edmonton, they may not arrive until nearer the end of the month. Franklin's Gulls do not start nest building until immediately prior to egg laying; both these events usually occur during the first week of May.

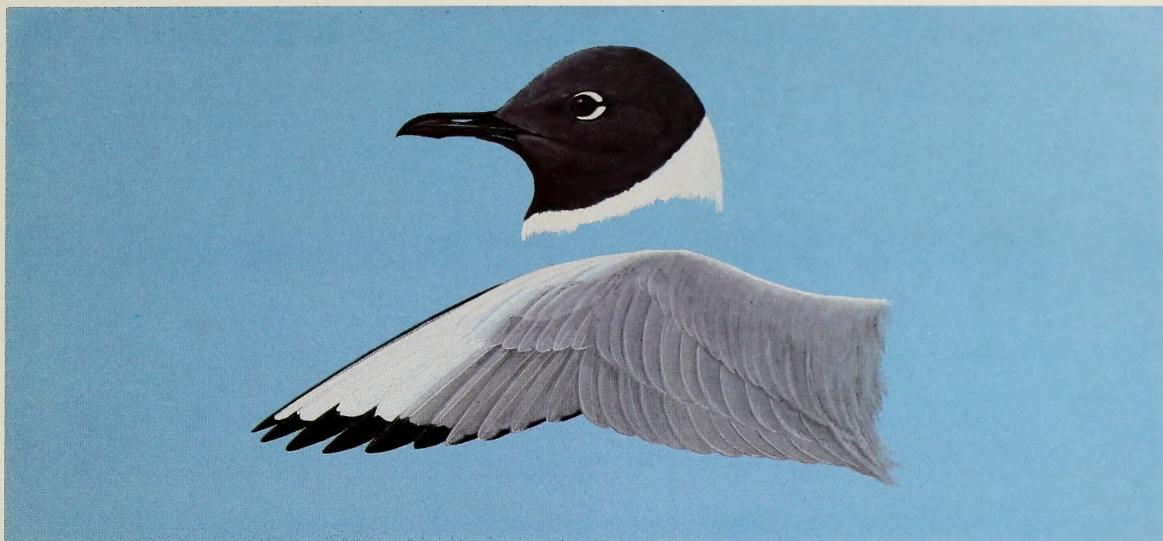
Though the breeding ranges of the Franklin's, California, and Ring-billed gulls are similar their nesting habits are different. Franklin's Gulls nest only over

water where they anchor their nest to cattails or bulrushes; they are not known to nest on land.

Like most other gulls, Franklin's Gull lays a clutch of three eggs. The eggs hatch in approximately 25 days, in early to mid-June. The young are able to fly in 30 days and can usually be seen around the countryside by mid-July.

Migration:

The timing of the autumn migration of Franklin's Gull is intermediate to that of California and Ring-billed gulls. The last departing Franklin's Gulls can be seen in Alberta usually during the first half of October; however most leave the Province by early September. When they leave Alberta they do not go west or directly south as do other gulls, but rather east to southern Manitoba, Minnesota, and the headwaters of the Mississippi River. There they turn south, following the broad Mississippi Valley to the Gulf of Mexico. Some birds remain there for the winter, but most proceed to the Pacific coast of Central America and northwest South America. The majority of Franklin's Gulls winter along the Pacific coast from Guatemala to Peru and Chile. Their migration route takes them 4000 to 5000 miles from Alberta.



Distinguishing features of the head and wing of Bonaparte's Gull.

BONAPARTE'S GULL (*Larus philadelphia*)

Range in Alberta and Identification:

The North Saskatchewan River forms the approximate southern boundary of the breeding range of Bonaparte's Gull in Alberta.

Bonaparte's Gull is a black-headed gull, resembling Franklin's Gull. It differs from Franklin's Gull in possessing a black rather than a dark red bill, and its legs are bright orange-red rather than dark red. In flight the best means of identification is the large area of white in the wing tips of Bonaparte's Gull. This is in contrast to the typically black and white patterned wing tips of all other common Alberta gulls.

Breeding Habits:

The breeding habits of Bonaparte's Gull are different from those of any other Alberta gull; Bonaparte's Gull nests in trees. The breeding habitat of this species is the northern muskeg where the pairs build their nests in spruce or tamarack trees surrounding small lakes. This species does not nest colonially, although there may be three or four pairs nesting at scattered points around a lake.

Unlike the other gulls, which had been studied elsewhere prior to being recorded in the Province, Bonaparte's Gull was relatively unknown when discovered in Alberta. Indeed, some of the first life history studies of this species were conducted near Belvedere and Camrose, Alberta, in the early part of this century.

In the spring Bonaparte's Gulls arrive in Alberta in early May, well after all other gulls. They return to their nesting areas in small flocks of up to ten or twelve individuals, much less ostentatiously than any of the other gulls.

Courtship takes place primarily in flight above the nesting area. Aerial courtship is the exception rather than the rule in the gull family.

Like Franklin's Gull, Bonaparte's Gull does not begin nest building until immediately prior to egg laying. Both members of the pair assist in building the nest which is constructed from small spruce and tamarack twigs held together with lichens. The usual clutch consists of three eggs although two are also fairly common. Incubation requires 24 days.

Little is known about the development of young Bonaparte's Gulls. A chick, only days out of the nest, was observed swimming on a lake near its presumed nest site, indicating that post-hatching development may take place away from the nest.

Migration:

Bonaparte's Gull is a relatively late migrant from Alberta; individuals may be seen well into late October. The primary wintering area of Bonaparte's Gull is the coastal United States. On the Atlantic coast it winters southward from South Carolina, and on the Pacific coast individuals are found from Washington to Mexico.

UNCOMMON ALBERTA GULLS

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Margaret R. Ballantyne)

Of the eight species of gulls which occur sporadically or accidentally in Alberta, only the Mew and Thayer's gulls are known to have occurred in the Province on more than ten occasions. Both Mew and Thayer's gulls are probably regular migrants through the northern half of the Province. The Mew Gull perhaps breeds in extreme northeastern Alberta but nests have not been located. The small human population in northern Alberta, plus the similarity between Mew and Ring-billed gulls, and Thayer's and Herring gulls probably account for the lack of information concerning these two species.

The Glaucous, Sabine's and Glaucous-winged gulls are usually considered to be scarce migrants or erratic wanderers in Alberta. Several recent records of all three species, however, indicate that they may occur more frequently than was previously thought; more studies are needed.

The Iceland and Ivory gulls have each been reported only once in Alberta, while the Black-legged Kittiwake has been recorded twice in Alberta, most recently in 1979.

Suggested Reading

- Bent, A.C., 1921. Life Histories of North American Gulls and Terns. U.S. Natl. Museum Bull. 113. Dover Reprint. Dover Publications, New York.
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